

# **Internet Broadband Router**

# XRT-401B

User's Guide

# Copyright

Copyright (C) 2002 PLANET Technology Corp. All rights reserved.

The products and programs described in this User's Manual are licensed products of PLANET Technology, This User's Manual contains proprietary information protected by copyright, and this User's Manual and all accompanying hardware, software, and documentation are copyrighted.

No part of this User's Manual may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form by any means by electronic or mechanical. Including photocopying, recording, or information storage and retrieval systems, for any purpose other than the purchaser's personal use, and without the prior express written permission of PLANET Technology.

# Disclaimer

PLANET Technology does not warrant that the hardware will work properly in all environments and applications, and makes no warranty and representation, either implied or expressed, with respect to the quality, performance, merchantability, or fitness for a particular purpose.

PLANET has made every effort to ensure that this User's Manual is accurate; PLANET disclaims liability for any inaccuracies or omissions that may have occurred.

Information in this User's Manual is subject to change without notice and does not represent a commitment on the part of PLANET. PLANET assumes no responsibility for any inaccuracies that may be contained in this User's Manual. PLANET makes no commitment to update or keep current the information in this User's Manual, and reserves the right to make improvements to this User's Manual and/or to the products described in this User's Manual, at any time without notice.

If you find information in this manual that is incorrect, misleading, or incomplete, we would appreciate your comments and suggestions.

# CE mark Warning

The is a class B device, In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

# Trademarks

The PLANET logo is a trademark of PLANET Technology. This documentation may refer to numerous hardware and software products by their trade names. In most, if not all cases, these designations are claimed as trademarks or registered trademarks by their respective companies.

# Revision

User's Manual for PLANET Internet Broadband Router:

Model: XRT-401B

Rev: 1.0 (May 2002)

Part No. EM-XRT401BV1

# TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
XRT-401B Features	
Package Contents	
Physical Details	4
CHAPTER 2 INSTALLATION	
Requirements	
Procedure	7
CHAPTER 3 SETUP	9
Overview	
Configuration	
Setup Wizard	
CHAPTER 4 PC CONFIGURATION	
Overview	
Windows Clients Macintosh Clients	
Linux Clients	-
CHAPTER 5 SYSTEM STATUS AND TOOLS	
Operation Status Screen	
DHCP	
Routing Table	
DDNS Status	. 29
Tools	. 29
CHAPTER 6 ADVANCED FEATURES	. 32
Overview	
LAN IP Configuration	
DHCP Setting	
Firewall Settings Privilege	
Virtual Servers	
Routing Configuration	
WAN MAC Clone	
DDNS Configuration	
MAC Control	. 40
APPENDIX A TROUBLESHOOTING	
Overview	
General Problems	
Internet Access	
APPENDIX B SPECIFICATIONS	-
XRT-401B	. 43

# Chapter 1 Introduction

1

# This Chapter provides an overview of XRT-401B's features and capabilities.

Congratulations on the purchase of your new Broadband Router. Internet Broadband Router XRT-401B is a multi-function device providing the following services:

- Shared Broadband Internet Access for all LAN users.
- 4-Port Switching Hub for 10BaseT or 100BaseT connections.

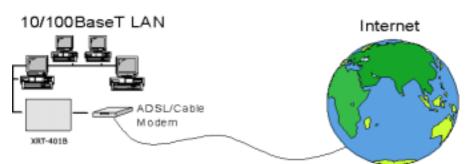


Figure 1-1: Broadband Router

# **XRT-401B Features**

XRT-401B incorporates many advanced features, carefully designed to provide sophisticated functions while being easy to use.

## **Internet Access Features**

- **Shared Internet Access.** All users on the LAN or WLAN can access the Internet through XRT-401B, using only a single external IP Address. The local (invalid) IP Addresses are hidden from external sources. This process is called NAT (Network Address Translation).
- DSL & Cable Modem Support. XRT-401B has a 10/100BaseT Ethernet port for connecting a DSL or Cable Modem. Via the WAN connectivity port, users can optimize their connection to the Internet with the most scalability, either xDSL (PPPoE, leased IP, PPTP client), All popular DSL and Cable Modems are supported.
- PPPoE and PPTP Support. The Internet (WAN port) connection supports PPPoE (PPP over Ethernet) and PPTP (Peer-to-Peer Tunneling Protocol), as well as "Direct Connection" type services.
- Fixed or Dynamic IP Address. On the Internet (WAN port) connection, XRT-401B supports both Dynamic IP Address (IP Address is allocated on connection) and Fixed IP Address.
- DDNS Support. 3 built-in DDNS clients will bring greatest convenience to users with dynamic IP address.

# **Advanced Functions**

- **Virtual Servers.** This feature allows Internet users to access Internet servers on your LAN. The required setup is quick and easy.
- **Privilege.** Privilege setting allows users to keep control numbers of workstations which are allowed or denied from accessing to the Internet.
- **Multiple DMZ.** XRT-401B can translate multiple public IP addresses to multiple private IP addresses. Up to 5 PCs on your local LAN can be configured to allow unrestricted 2-way communication with Servers or individual users on the Internet. This provides the ability to run programs which are incompatible with Firewalls.
- **URL Filter.** Use the URL Filter to block access to undesirable Web sites by LAN users.
- MAC Control. This feature allows users to block specific PCs via MAC assignment to access Internet via XRT-401B.
- **VPN Pass-Through** VPN (Virtual Private Networking) connections via PPTP,L2TP and IPSec are transparently supported no configuration is required.

## **LAN Features**

- **4-Port Switching Hub.** XRT-401B incorporates a 4-port 10/100BaseT switching hub, making it easy to create or extend your LAN.
- **DHCP Server Support.** Dynamic Host Configuration Protocol provides a dynamic IP address to PCs and other devices upon request. XRT-401B can act as a **DHCP Server** for devices on your local LAN and WLAN.
- Multi Segment LAN Support. LANs containing one or more segments are supported, via XRT-401B's RIP-I & RIP-II (Routing Information Protocol) support and built-in static routing table.

## **Configuration & Management**

- *Easy Setup.* Use your WEB browser from anywhere on the LAN for configuration.
- Remote Management. XRT-401B can be managed from any PC on your LAN. And, if the Internet connection exists, it can also (optionally) be configured via the Internet.

## **Security Features**

- Password protected Configuration. Logon password protection is provided to prevent unauthorized users from modifying the configuration data and settings.
- **NAT Protection.** An intrinsic side effect of NAT (Network Address Translation) technology is that by allowing all LAN users to share a single IP address, the location and even the existence of each PC is hidden. From the external viewpoint, there is no network, only a single device Broadband Router XRT-401B.
- Hacker Attack Protect Keeps your network away from malicious attacking.
- **Block Hacker Scan** Disable ping response from WAN side to hide router on the net and prevent from hacker attack.

# Package Contents

The following items should be included:

- Broadband Router Unit
- Power Adapter
- CD-ROM containing the on-line manual.

If any of the above items are damaged or missing, please contact your dealer immediately.

# **Physical Details**

# **Front Panel**

The front panel of XRT-401B has 3 LEDs for each 10/100 Mbps ports and one 10/100 Mbps WAN port, two Module Status LED at the left. WAN port, LAN ports and the uplink port are at the right. Figure 2 displays a front panel of the router.

10/10	00 Port S	tatus LE				LAN Po	rts		1210
			WAX	V Port				Uplin	k Port
					1				
. I.		1	_	_			_		
		••	-	507	517	<b>VII</b>		507	570
			12	711	715	715	11-	717	7
	-								

Figure 1-2: Front Panel

LED definitions		
Power	Green	Lights to indicate XRT-401B is powered on.
Diag	Red	<i>Lights</i> to indicate XRT is under its self-diagnosis mode during system boot-up.
		Off to indicate that self-diagnosis successfully proceeded.
Link/Act	Green	On – XRT-401B is successfully connected to a device through the corresponding port (1, 2, 3, or 4).
		Flashing - Transmitting or receiving data over that port.
FDX/COL	Green	<i>Lights</i> to indicate that the connection made through the corresponding port is running in Full Duplex mode.
		<i>Blinks</i> periodically to indicate that the connection is experiencing collisions.
LAN Port LEDs	Orange	On - LAN port connection is using a 100BaseT connection.
- 10/100		Off - If the port is being used, OFF indicates a 10BaseT connection.
WAN Port	Green	On - While connection to DSL/Cable modem is built
LED		OFF - No connection to DSL/Cable modem.

10/100BaseTX LAN connectors	Use standard LAN cables (RJ45 connectors) to connect this port to your PCs. Both 10BaseT and 100BaseT connections can be used simultaneously.		
	If the "Uplink" port is used, port 4 can NOT be used.		
WAN port (10/100BaseTX)	Connect the DSL or Cable Modem here. If your modem came with a cable, use the supplied cable. Otherwise, use a standard LAN cable.		

## **Rear Panel**



Figure 1-3: Rear panel

Reset ButtonPressing the Reset button for more than 3 seconds. XRT-<br/>401B will restore to factory default setting.

**DC Power Input** To connect the adapter to receive power.

### **Restore Default IP Address and Clear Password**

If XRT-401B's IP Address or password is lost, the following procedure can be used to recover from this situation.

Pressing the Reset button for more than 3 seconds. XRT-401B will restore to factory default setting. Note that this should be done only when you had tried all the troubleshooting options. Pressing the Reset button during operation may bring you into the risk of creating IP address conflict between your PC and the router. In such a case, you may be compelled to reboot your entire system(s).

# Chapter 2 Installation

2

This Chapter covers the physical installation of XRT-401B.

# Requirements

- DSL or Cable modem, and an Internet Access account with an ISP, for shared Internet resouces.
- Network cables. Use standard 10/100BaseT network (UTP) cables with RJ45 connectors
- TCP/IP network protocol must be installed on all PCs.

# Procedure

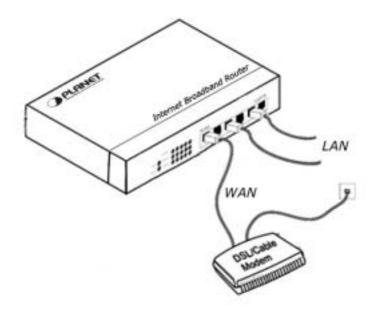


Figure 2-1: Installation Diagram

### 1. Choose an Installation Site

Select a suitable place on the network to install XRT-401B. Ensure XRT-401B and the DSL/Cable modem are powered OFF.

### 2. Connect LAN Cables

- Use standard LAN cables to connect PCs to the Switching Hub ports on XRT-401B. Both 10BaseT and 100BaseT connections can be used simultaneously.
- If required, use a standard LAN cable to connect the "Uplink" port to a standard port on another hub.
   Note: If the "Uplink" port is used, port 4 can NOT be used.

Note: If the "Uplink" port is used, port 4 can NOT be used.

## 3. Connect WAN Cable

Connect the DSL or Cable modem to the WAN port on XRT-401B. Use the cable supplied with your DSL/Cable modem. If no cable was supplied, use a standard cable.

## 4. Power Up

- Power on the Cable or DSL modem.
- Connect the supplied power adapter to XRT-401B and power up. Use only the power adapter provided. Using a different one may cause hardware damage

## 5. Check the LEDs

- The LAN LED should flash in Orange, then turn Off. If it stays Orange, there is a hardware error.
- For each LAN (PC) connection, the LAN Link/Act LED should be ON (provided the PC is also ON.)
- The WAN LED should be ON.

# Chapter 3 Setup

This Chapter provides details of the Setup process.

# **Overview**

This chapter describes the setup procedure for:

- Internet Access
- LAN configuration
- Assigning a Password to protect the configuration data.

PCs on your local LAN may also require configuration. For details, see *Chapter 4 - PC Configuration*.

Other configuration may also be required, depending on which features and functions of XRT-401B you wish to use. Use the table below to locate detailed instructions for the required functions.

To Do this:	Refer to:
Configure PCs on your LAN.	Chapter 4: PC Configuration
Check machine Status, and system tools	Chapter 5: System Status and Tools
Use any of the following Internet features: LAN IP configuration DHCP setting Firewall Configuration Privilege Virtual Servers Routing WAN MAC Clone DDNS setting MAC control	Chapter 6: Advanced Features



Where use of a certain feature requires that PCs or other LAN devices be configured, this is also explained in the relevant chapter.

# Configuration

XRT-401B contains an HTTP server. This enables you to connect to it, and configure it, using your Web Browser. **Your Browser must support JavaScript**. The configuration program has been tested on the following browsers:

- Netscape V4.08 or later
- Internet Explorer V4 or later

## Preparation

Before attempting to configure XRT-401B, please ensure that:

- Your PC can establish a physical connection to XRT-401B. The PC and XRT-401B must be directly connected (using the Hub ports on XRT-401B) or on the same LAN segment.
- XRT-401B must be installed and powered ON.
- If XRT-401B's default IP Address (192.168.0.1) is already used by another device, the other device must be turned OFF until XRT-401B is allocated a new IP Address during configuration.

## **Connecting to XRT-401B**

To establish a connection from your PC to XRT-401B:

- 1. After installing XRT-401B in your LAN, start your PC. If your PC is already running, restart it.
- 2. Start your WEB browser.
- 3. In the *Address* box, enter "HTTP://" and the IP Address of XRT-401B, as in this example, which uses XRT-401B's default IP Address:

#### HTTP://192.168.0.1

 If connection is established, a pop-up password request page will show up. Insert "admin" into the Password field and leave the User Name field empty.

#### If you can't connect

If XRT does not respond, check the following:

- Machine is properly installed, LAN connection is OK, and it is powered ON. You can test the connection by using the "Ping" command:
  - Open the MS-DOS window or command prompt window.
  - Enter the command: ping 192.168.0.1
     If no response is received, either the connection is not working, or your PC's IP address is not compatible with XRT-401B's IP Address. (See next item.)
- If your PC is using a fixed IP Address, its IP Address must be within the range 192.168.0.2 to 192.168.0.254 to be compatible with XRT-401B's default IP Address of 192.168.0.1. Also, the *Network Mask* must be set to 255.255.255.0. See *Chapter 4 PC Configuration* for details on checking your PC's TCP/IP settings.
- Ensure that your PC and XRT-401B are on the same network segment. (If you don't have a router, this must be the case.)

## Setup Wizard

The first time connecting to XRT-401B, Setup Wizard will show up at home page automatically. (Setup Wizard will also run if XRT-401B's default settings are restored.)

- 1. Ensure the Cable/DSL modem is connected and powered ON. Also, you need the data provided by your ISP.
- Start the Wizard, and step through it until finished. It is required to know the type of Internet connection service used by your ISP. The common types are explained below.

) PLANET	Internet Broadband Router
Hame     Mane     Mane	

Figure 3-1: Home Screen

## **PPPoE Connection for WAN**

If your ISP uses PPPoE (Point-to-Point Over Ethernet) to establish communications with end-users, you will receive information such as **User Name** and **Password** from them. To set up a PPPoE connection for WAN, follow the instructions as shown in Figure 3-1 *Cable/DSL Setup Menu Screen* and Figure 3-2 Cable/DSL *Setup Menu with "No" Option Screen*. Then, it is required to configure following values to make your router work. (See Figure 3-3 *PPPoE Menu Screen*)

-**User Name** and **Password:** Fill in the entries with the information you get from your ISP.

-Service Name: If your ISP provides this info, please type it into the field.

-Connect on Demand: If you have been disconnected due to inactivity,

*Connect on Demand* will enable you to establish a connection again between your Router and ISP.

-Max Idle Time: The Max Idle time is the amount of time you would like to pass before the Router drops your Internet connection due to inactivity. Enter zero (0) in the field to remain Internet connection on at all time. The idle time ranges from 0 to 60 minutes. DNS Time

🕀 🧰 Status 🕸 💼 Tosla

ID Advanced ID Help



Provider

Has your Internet Service Previder given you static IP address?

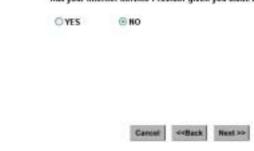


Figure 3-3 Cable/DSL Setup Menu with "No" Option



Figure 3-4 PPPoE Menu Screen

## Fixed IP for WAN

If your ISP has assigned your home a static IP address (See Appendix A *About Static and Dynamic IP Address*), you may connect to the Internet by using a fixed, or static address. To set up a Fixed IP for WAN, do the following steps as an example.

**Step 1** Choose "**YES**" when you see the question: (See Figure 3-1 *Cable/DSL Setup Menu*).

Has your Internet Service Provider given you static IP address?

Then select " Fixed IP".

**Step 2** Enter the information of **IP Address**, **Subnet Mask** and **Default Gateway** as required. Then click the "NEXT" button. You should obtain above information from your ISP. If not, contact your ISP.

Home     Setup Wized     Setup     Setup     Poisseed     Configure     D Alas IP     DND	fixed, or static IP addre DNS), into the proper fil provided by your cable i	IP setting: Some ISP's will allow you to connect to the Internet using a no. Enter the telated information, Network muck, Debuilt Gateway and elde on the Setag screen. Please input information that may have been or DSL Internet Service Provider.
Time Time	( YES	© NO
Tools	e	Finad IP OPPTP
E Advanced E E Help	P Address	210 01 152 181
	Subnet Mask	255 ] 295 ] 255 ] 4
	Detault Gateway :	210 81 152 254
		Cancel ++Each. Next ++

#### Figure 3-5 Cable/DSL Setup Menu

**Step 3** Enter the **DNS Address.** (See Figure 3-6 *DNS Menu Screen*) Your ISP should provide you with at least one DNS IP Address. If not, contact your ISP.

Home     Setup Wizard     Setup     Setup     Setup     Configure     Alias P     S DNS	DNS Has your Internet Service Provider given you the DNS address(es)? @ YES O NO
Consecution     Time     Status     Tools     Advanced     Hep	DHS Address: 168 192 1 1

Figure 3-6 DNS Setup Menu

# **PPTP For WAN**

**Step 1** Choose "**YES**" when you see the question: (See Figure 3-1 *Cable/DSL Setup Menu*)

Has your Internet Service Provider given you static IP address? Then select "PPTP".



Figure 3-7 Cable/DSL Setup Menu

**Step 2** Click "Next>>", and then the following screen will appear. Enter the information of "PPTP Account", "PPTP Password", and "Host Name". "My IP Address" and "My Subnet Mask" assigned by your Internet Service Provider should be filled in.

Home     Detas Word      Detas     Detas     Detas     Detas     Toolo      Advaced	normally optional, by may b	e required by some service er IP. And You should fill 14 et	your Senico Provider. The Hot! Name is providers. 'Service IP' Address' is your internet y P' Address' and 'My Subert Mark' assigned by urape
Contract (Contract)	PPTP Account		
	PPTP Password		
	Retype passward		
	Host Name		
	Service IP Address :	0000	
	My IP Address	0000	
	My Subwet Meets	0000	
	Connection ID	0	(Optional)
	Connect on Demand :	C Inabled	Disabled
		Canadi reliant	Mag 11

Figure 3-8 PPTP Setting Screen

## **Dynamic IP for WAN**

If you did not receive any values such as fixed IP address, Subnet Mask, Default Gateway and Primary DNS IP address from your ISP, choose the "**NO**" option in both Figure 3-3 *Cable/DSL Setup Menu Screen* and Figure 3-10 *DNS Menu Screen*.

### **Alias IP Setup**

Alias IP Setup allows you to enter maximum 5 IP addresses that can be distributed to your computer. The error message will pop up if you enter more than 5 IP addresses. See Figure 3-11 *Alias IP Setup*. Note that this function is effective only when your ISP supports it. If you want to delete the entered IP address, pull down the IP address and highlight the IP address you want to delete. Click *Delete this entry*. Then this IP address will be deleted.

The application of Virtual Server and DMZ Host IP Addresses requires more than one IP address. Alias IP provides a good support for such applications.

Home     Step Wized     Sets     Sets     Sets     Dessword     Dessword     Dessword	Alias IP Setup This feature sets an alias IP ac	Idvess.			
Also P D DNS	IP Address	· market and	t Alies E	at an interest of the second	1
Time 1	Allas IP	210	61	162	102
Batus	Subnet Mask	255	255	255	0
P Taola R Advanced R Help		Appl	r Ca	ncet	

Figure 3-9 Alias IP Setting

### DNS

Select the item of DNS from the Setup menu. The following screen will appear. You can enter the **DNS Address.** Your ISP should provide you with at least one DNS IP Address. If not, contact your ISP.

E Setup Wideed	ONS	
Concept 1	DNS Address	210 100 100
Configure Configure	19910455561569	288 288 288 0
DHS		218 . 11 152 . 254
C Tree		
		Apply Canad

Figure 3-10 DNS Setting

# **Time Zone**

You can get the data of log files by setting the time zone.



Figure 3-10 Time Zone Setting

# Chapter 4 PC Configuration



This Chapter details the PC Configuration required on the local ("Internal") LAN.

# **Overview**

For each PC, the following may to be configured:

- TCP/IP network settings
- Internet Access configuration

## Windows Clients

This section describes how to configure Windows clients for Internet access via XRT-401B.

The first step is to check the PC's TCP/IP settings.

XRT-401B uses the TCP/IP network protocol for all functions, so it is essential that the TCP/IP protocol be installed and configured on each PC.

### **TCP/IP Settings**

# If using the default Broadband Router settings, and the default Windows 95/98/ME/2000 TCP/IP settings, no changes need to be made.

- By default, XRT-401B will act as a DHCP Server, automatically providing a suitable IP Address (and related information) to each PC when the PC boots.
- For all non-Server versions of Windows, the default TCP/IP setting is to act as a DHCP client.
- If you wish to check your TCP/IP settings, the procedure is described in the following sections.

## Checking TCP/IP Settings - Windows 9x/ME:

1. Select Control Panel - Network. You should see a screen like the following:

etwork		? ×				
Configuration Identification	an Access Control					
The following network components are installed:						
<ul> <li>NetBEUI -&gt; PCI Fas</li> <li>NetBEUI -&gt; Dial-Up</li> <li>NetBEUI -&gt; Dial-Up</li> </ul>		anti				
TCP/IP → PCI Fast Ethemet Adapter						
TCP/IP -> Dial-Up Adapter TCP/IP -> Dial-Up Adapter #2 (VPN Support) File and printer sharing for NetWare Networks						
•						
Add	Remove	Properties				

Figure 4-1: Network Configuration

- 2. Select the TCP/IP protocol for your network card.
- 3. Click on the *Properties* button. You should then see a screen like the following.

CP/IP Proper	lies						?
Bindings	Advanc	ed	NetBIOS	1	DNS Con	figuration	n
Gateway		WINS Configuration IP Address					
An IP addres your network network adm	does not a	utomatic	ally assign	IP ad	dresses, s	ask your	
below.	an IP addre	ess autor	matically				
C Obtain			metically				1
© Obtain	an IP addre		matically	_			1

Figure 4-2: IP Address (Win 95)

Ensure your TCP/IP settings are correct, as follows:

### Using DHCP

To use DHCP, select the radio button *Obtain an IP Address automatically*. This is the default Windows settings.

Restart your PC to ensure it obtains an IP Address from XRT-401B.

#### Using "Specify an IP Address"

- If your PC is already configured, do NOT change the settings on the IP Address tab shown in **Figure** above.
- On the Gateway tab, enter XRT-401B's IP address in the New Gateway field and click Add, as shown below. Your LAN administrator can advise you of the IP Address they assigned to XRT-401B.

TCP/IP Properties			? ×
Bindings A Gateway	dvanced     WINS C	NetBIOS	DNS Configuration IP Address
			vill be the default. The ch these machines
New gateway: 192 . 168	. 0 . 1	Add	
_installed gatew	øys:	Bems	Ve

Figure 4-3: Gateway Tab (Win 95/98)

• On the DNS Configuration tab, ensure Enable DNS is selected. If the DNS Server Search Order list is empty, enter the DNS address provided by your ISP in the fields beside the Add button, then click Add.

TCP/IP Propertie	18		? ×
Gateway Bindings	Advanced	Configuration NetBIOS	IP Address DNS Configuration
C Djsable D			
Host	Search Order	Domain	
		$\geq$	Add
		_	Bemave

Figure 4-4: DNS Tab (Win 95/98)

#### Checking TCP/IP Settings - Windows 2000:

- 1. Select Control Panel Network and Dial-up Connection.
- 2. Right click the *Local Area Connection* icon and select *Properties*. You should see a screen like the following:

Local Area Connection 7 Properties	ĸ
General Sharing	
Connect using:	
PLANET ENW-9504 PCI Fast Ethernet Adapter #3	
Configure	
Components checked are used by this connection:	
Chilleter D Destroyal Data ar	
Install Uninstall Properties	
Description	
Allows your computer to access resources on a Microsoft network.	
	L
Show icon in taskbar when connected	L
	L
OK Cancel	

Figure 4-5: Network Configuration (Win 2000)

- 3. Select the TCP/IP protocol for your network card.
- 4. Click on the *Properties* button. You should then see a screen like the following.

	perties
meral	
	d automatically if your network supports sed to ask your network administrator to
<ul> <li>Obtain an IP address autor</li> </ul>	natically
C Use the following IP addre	er:
IP address	
Subrett maak	
Default gateway	
Obtain DNS server addres	s automatically
C Use the following DNS ser	ver addresses
Preferred DN5 server	

Figure 4-6: TCP/IP Properties (Win 2000)

5. Ensure your TCP/IP settings are correct:

#### Using DHCP

To use DHCP, select the radio button *Obtain an IP Address automatically*. This is the default Windows settings.

Restart your PC to ensure it obtains an IP Address from XRT-401B.

#### Using a fixed IP Address ("Use the following IP Address")

If your PC is already configured, check with your network administrator before making the following changes.

- Enter XRT-401B's IP address in the *Default gateway* field and click *OK*. (Your LAN administrator can advise you of the IP Address they assigned to XRT-401B.)
- If the DNS Server fields are empty, select Use the following DNS server addresses, and enter the DNS address or addresses provided by your ISP, then click OK.

### Checking TCP/IP Settings - Windows XP:

- 1. Select Control Panel Network Connection.
- 2. Right click the *Local Area Connection* and choose *Properties*. You should see a screen like the following:

Local Area Connec	tion Prepert	ies	7
ieneral Authentication	Advanced		
Connect using			
National Semicor	ductor Cop. DP	83820 Gi	gabit Network.
		1	Configure.
This opmeation uses th	e following items		- Andrewski - Constant
2 Y NALA NAB 2 Y NALA ROS 2 Y NALA ROS	PK/NetBIUS Co	np#ble	Transport Prof
lgstal.	Quintal		Pyoperies
Transmission Control wide area network on across diverse interco	olocol fivel provi	des comm	
Shegricon in notifica	dan aisa ivhen o	ornecte	

Figure 4-7: Network Configuration (Windows XP)

- 3. Select the TCP/IP protocol for your network card.
- 4. Click on the *Properties* button. You should then see a screen like the following.

Internet	Protocol (TCP/IP)	Preperties 🛛 🛛 🔀
General	Alternate Contiguration	n
This cap		ed automatically if your network supports reed to ask your network administrator for
00	tam on IP address with	on atic ally
04	e the following IP adds	eik:
17 -	dein.	
11,de	of taxat	
24	d prove	
00	tain DNS cerver addre	er automatically
OU	g the following DRS or	irver addecost
Del	nar DNE server	
<u>≙</u> tre	an Dife and	
		Advanced
		Of. Contel

Figure4-8: TCP/IP Properties (Windows XP)

5. Ensure your TCP/IP settings are correct.

## Using DHCP

To use DHCP, select the radio button *Obtain an IP Address automatically*. This is the default Windows settings.

Restart your PC to ensure it obtains an IP Address from XRT-401B.

#### Using a fixed IP Address ("Use the following IP Address")

- If your PC is already configured, do NOT change the settings on the screen shown in **Figure** above, unless advised to do so by your network administrator.
- You can enter XRT-401B's IP address in the *Default gateway* field and click *OK*. Your LAN administrator can advise you of the IP Address they assigned to XRT-401B.
- If the DNS Server fields are empty, select Use the following DNS server addresses, and enter the DNS address or addresses provided by your ISP, then click OK.

## **Internet Access**

To configure your PCs to use XRT-401B for Internet access:

- Ensure that the DSL modem, Cable modem, or other permanent connection is functional.
- Use the following procedure to configure your Browser to access the Internet via the LAN, rather than by a Dial-up connection.

### For Windows 9x/2000

- 1. Select Start Menu Settings Control Panel Internet Options.
- 2. Select the Connection tab, and click the Setup button.
- 3. Select "I want to set up my Internet connection manually, or I want to connect through a local area network (LAN)" and click *Next*.
- 4. Select "I connect through a local area network (LAN)" and click Next.
- 5. Ensure all of the boxes on the following *Local area network Internet Configuration* screen are **unchecked**.
- 6. Check the "No" option when prompted "Do you want to set up an Internet mail account now?".
- 7. Click *Finish* to close the Internet Connection Wizard. Setup is now completed.

## For Windows XP

- 1. Select Start Menu Control Panel Network and Internet Connections.
- 2. Select Set up or change your Internet Connection.
- 3. Select the *Connection* tab, and click the *Setup* button.
- 4. Cancel the pop-up "Location Information" screen.
- 5. Click Next on the "New Connection Wizard" screen.
- 6. Select "Connect to the Internet" and click Next.
- 7. Select "Set up my connection manually" and click Next.
- 8. Check "Connect using a broadband connection that is always on" and click Next.
- 9. Click *Finish* to close the New Connection Wizard. Setup is now completed.

## **Macintosh Clients**

From your Macintosh, you can access the Internet via XRT-401B. The procedure is as follows.

- 1. Open the TCP/IP Control Panel.
- 2. Select Ethernet from the Connect via pop-up menu.
- 3. Select *Using DHCP Server* from the *Configure* pop-up menu. The DHCP Client ID field can be left blank.
- 4. Close the TCP/IP panel, saving your settings.

#### Note:

If using manually assigned IP addresses instead of DHCP, the only change required is to set the *Router Address* field to XRT-401B's IP Address.

# **Linux Clients**

To access the Internet via XRT-401B, it is only necessary to set XRT-401B as the "Gateway".

Ensure you are logged in as "root" before attempting any changes.

#### **Fixed IP Address**

By default, most Unix installations use a fixed IP Address. If you wish to continue using a fixed IP Address, make the following changes to your configuration.

- Set your "Default Gateway" to the IP Address of XRT-401B.
- Ensure your DNS (Name server) settings are correct.

#### To act as a DHCP Client (recommended)

The procedure below may vary according to your version of Linux and X -windows shell.

- 1. Start your X Windows client.
- 2. Select Control Panel Network
- 3. Select the "Interface" entry for your Network card. Normally, this will be called "eth0".
- 4. Click the *Edit* button, set the "protocol" to "DHCP", and save this data.
- 5. To apply your changes
  - Use the "Deactivate" and "Activate" buttons, if available.
  - OR, restart your system.

# Chapter 5 System Status and Tools

This Chapter details the operation of XRT-401B and the status screens.

Operation

Once both XRT-401B and the PCs are configured, operation is automatic.

However, there are some situations where additional Internet configuration may be required:

- If using Internet-based applications, it may be necessary to specify which PC receives an incoming connection.
- Some non-standard applications may require use of the DMZ feature.

# **Status Screen**

Use the Status link on the main menu to view this screen.

Home	Router Name :		
- Setto Wizard	Firmware Version :	2.00.0006 (2002.06.31)	
De Setup	WAN IP Configure :	PPPoE Connection	
Contgure	WAN Status :	Connected	
WAN AND F     ONS	Firewall Settings :	NAT :	ENABLED
🖸 Time		Hacker Attack Protect:	ENABLED
File Status FO Status		DHCP server :	ENABLED
OHCP Table     Resting Table		Block Hacker Scan	ENABLED
OCHS Status		Female Management	DISABLED
P Tools D Advanced	LAN :	(MAC Addwer 00/03-44-6A-	A2-2A
Po Hep	10.500 CT	IP Address Subnet Mask	192.168.0.254 255.255.255.0
	WAN :	PMAC Addmins: 00403-44-8A	A2-3BJ
		IP Address Subret Mesk: Detaut Gateway : DNS	61,224,37,98 255,255,255,0 61,224,37,254 168,95,182,1 168,95,11 0,0,0,0
		Discovered Came	west

Figure 5-1: Status Screen

## **Status Screen**

System	
Router Name	Name of device.
Firmware Version	Firmware version installed on machine.
WAN IP Configure	This field shows type of connection enabled on device. (PPPoE, PPTP connection, Static IP or Dynamic IP)
Internet Status	
WAN	These fields display the <i>IP Address</i> , <i>Subnet Mask</i> and <i>Default Gateway</i> of the router as seen by external users on the Internet. <i>DNS (Domain Name Server)</i> shows the IP address of the DNS currently being used.
Connection Status	Current connection status: <ul> <li>Connected</li> <li>Connecting</li> <li>Disconnected</li> </ul>
LAN Status	
LAN	These fields display the current <i>IP address</i> and <i>Subnet Mask</i> of the router as seen by the users on your internal network
Network Mask	The Network Mask (Subnet Mask) for the IP Address above.
DHCP Server	This shows the status of the DHCP Server function - either "Enabled" or "Disabled".
	For additional information about the PCs on your LAN, and the IP addresses allocated to them, use the <i>PC Database</i> option on the <i>Advanced</i> menu.

# DHCP

This table shows the number of clients who exist on your DHCP pool and their information such as MAC Address, Computer name and IP Address. Figure 3-15 shows the *DHCP Table Screen*.



Figure 5-2: DHCP Status Screen

# **Routing Table**

You will see the current routing configuration such as the address of Destination LAN IP, Default Gateway, Subnet Mask, Metric and the Interface (LAN or WAN). See Figure 3-16 *Routing Table Menu Screen* 

Contigue	Destination LAN IP	Default Gateway	Subnet Mask	Metric	Interface
NONTALLS P	0000	01.224 37.254	0.000	0	WAN
CNS-	192.168.0.0	192 168 0 254	255 255 255 0	0	LAN
(Hell)					

Figure 5-3 Routing Table Menu Screen

# **DDNS Status**

XRT-401B supports the DDNS service allowing you to use one specific DNS name while the actual IP address changes. You can see the Dynamic DNS status from this screen. This screen shows the information of the connection status for the supported DDNS server.

Skup Waand  Skup  Finance	DONS Status This screen displays the connection status i	for the supported DDNS server
Contgue	Server	Status
WANGARAN IP	MyDyrDNS	Connect O K
DNS D Time	No-P	No Account
	DDN5	No Account
CHCP Tase     Poulog Table     CONS Tase     Tool     Asterced     Hep		

#### Figure 5-4 DDNS Status Screen

# Tools

## System Log

Users may acquire information of the system in this screen, including the time, the type and the message.

Nome	System Log	1	
Setup	Time	Туре	Message
🖬 Status	00:00:03	DHCPC	Entered WAIT_OFFER state.
🗃 Tools	00:00:03	DHCPC	Timed out in WAIT_OFFER state.
🗐 System Log	00:00:11	DHCPC	Entered WAIT_OFFER state.
- 🗿 Hacker Log	00:00:11	DHCPC	Timed out in WAIT_OFFER state.
Reset	00:00:27	DHCPC	Entered WAIT_OFFER state.
🕑 Upgrade	00:00:27	DHCPC	Timed out in WAIT_OFFER state.
	00:00:59	DHCPC	Entered WAIT_OFFER state.
Backup	00:00:59	DHCPC	Timed out in WAIT_OFFER state.
🗎 Advanced	00:02:02	DHCPC	Entered WAJT_OFFER state.
🚞 Help	00:02:02	DHCPC	Timed out in WAIT_OFFER state.
	00:03:05	DHCPC	Entered WAIT_OFFER state.
	00:03:05	DHCPC	Timed out in WAIT_OFFER state.
	00:04:08	DHCPC	Entered WAIT_OFFER state.
	00:04:08	DHCPC	Timed out in WAIT_OFFER state.
	00:05:11	DHCPC	Entered WAIT_OFFER state.
	00:05:11	DHCPC	Timed out in WAIT_OFFER state.
	00:05:14	DHCPC	Entered WAIT_OFFER state.
	00:05:14	DHCPC	Timed out in WAIT_OFFER state.
	00:07:17	DHCPC	Entered WAIT_OFFER state.
	00:07:17	DHCPC	Timed out in WAIT_DEFER state

Figure 5-5 System Log Screen

# Hacker Log

You can detect the intrusion from this screen. This screen shows the information of the unauthorized access request to your network.



Figure 5-6 Hacker Log Screen

### Reset

You have two options to reset your Router. If you choose "**Restart**", the router will reboot yet retain all the previous configuration settings. On the other hand, if you choose "**Restore Factory Settings**", the Router will remove all the previous settings and go back to the factory state.

Home     Setup Wight     Betup Wight     Betup     Setup     Status     Dem Status	Reset Restart will reboot the router and retain all of your configuration settings. Restore Pactary Settings will territies all settings and place the router in its original factory state. @ Restart O Restore Factory Settings
<ul> <li>Upgrade</li> <li>Elacitup</li> <li>Elacitup</li> <li>Advanced</li> <li>Hulp</li> </ul>	Apply Cantel

Figure 5-7 Reset Screen

# Upgrade

You may download the latest firmware version from us. To upgrade Router's firmware, simply click the "Browse" button on the Upgrade Menu Screen and find the firmware upgrade file that you download from the our website. Then, double-click the "Start" button.

Home     Satup Waant     Satup     Satup	Upgrade Upgrade firmware will allo firmware image.	w you to apprade the firmware on your stuter using a newly updated
Den Toola Bystem Leg	Firmware Version :	2 00 02995 (2002 04 23)
Hacker Log	Upgrade Firmware	Browne
B Read	122.92	
Opprade     Decision		Start Carviel
Advances		
🕮 💼 Help		

Figure 5-8 Upgrade Screen

## Backup

You can save the current configuration file to your PC or restore the configuration from PC.

Home     Situp Waxes     Situp Waxes     Situp     Situs     Situs     Tools	Backup Settings Please press the "Backup Settings" butter to save the configuration data to your PC. Backup Settings
System Lag     System Lag     Hacker Lag     Read     Voynade     Declup     Advancet	Restore Settings Enter the path and name of the backup file then press the "Restore Settings" button below. You will be prompted to confirm the restoration.
R 🖬 Help	Restore Settings

Figure 5-9 System Backup Screen

# Chapter 6 Advanced Features



This Chapter explains when and how to use XRT-401B's "Advanced" Features.

# **Overview**

Once you've configured the basic settings discussed in *chapter 3*, you may move to the settings of Advanced Features. In this section, we'll explain the setting of LAN IP, DHCP, Firewall, Privilege, Virtual Servers and the Routing. You may set up the Advanced Features by clicking the "Advanced Features" button on the left column of the page.

The following advanced features are provided.

- LAN IP configuration
- DHCP setting
- Firewall Configuration
- Privilege
- Virtual Servers
- Routing
- WAN MAC Clone
- DDNS setting
- MAC control

# LAN IP Configuration

The LAN IP and Subnet Mask of XRT-401B are the values seen by the users on their internal network. The default value is 192.168.0.1 for IP and 255.255.255.0 for Subnet Mask.

Home     D Seta: Waterd     Be     Seta:     Seta:     De     Torie	LAN IP Setting The function will change y IP address of renaw the D	our router local network IP address. After the setting you may be need to charge PC's NCP chert IP.
Even     Extra Provide      Extra Provide      Extra Provide      Provide      Provide      Even     Even	IP Address Subret Mesk	[702 . [708 . ]0 . ]254 [255.255.25 8 . ■]  Agety   Eamlet

Figure 6-1: LAN IP menu

# **DHCP Setting**

### **Overview**

A DHCP (Dynamic Host Configuration Protocol) Server automatically assigns IP address to each computer on your network. Unless you already have one, it is highly recommended that your router be set up as a DHCP server. Simply fill out the values of each entry and click the "**Apply**" button. DHCP Setting:

#### • Do you want to enable DHCP Server on this router?

Click the "**Enable**" option to enable the DHCP server. Note that you can't have two DHCP servers on the network at the same time. Set the router's DHCP option to "**Disable**" if you already have one DHCP server on your network.

#### • Number of DHCP Users

Enter the maximum number of PC that you want the DHCP server to assign IP addresses to, with the absolute maximum being 253.

#### • Starting IP Address

Enter a numerical value for the DHCP server to start with when issuing IP address.

Home     Soco Wizari     Soco Wizari     Soco     Soco     Soco     Coo     Advanced     LANP Swithp     DHOP Swithp     DHOP Swithp     DHOP Swithp     DHOP Swithp     DHOP Swithp     DHOP Swithp     DWAVMAC Come     DONS Swithp     MACCODDI      MACCODDI	DHCP Setting The roter canbe set as a DHCP I DHCP server option, your PC clear Do you want to enable DHCP Serv # YES C NO Number of DHCP Uses.	
	Starting IP Address	250 192.166.0. 2 Marriel Economi

Figure 6-1: DHCP Setting Screen

# **Firewall Settings**

**NAT** allows all of the computers on your network to use one IP address. **Hacker Attack Protect** keeps your network away from hacker attacking. **Block Hacker Scan** is used to hide the router so that the hackers won't find it on the network.

**Remote Management** makes you able to manage the router from Internet.

**DMZ Host IP Addresses** can allow one local user to be exposed to the Internet. As local user wish to use some special-purpose service such as Internet game or Video-conferencing.

Home     Setap Woord     Setap Woord     Setap     Setap     Setap     Setap     Setap     Setap     Setap     Color     Advanced     Color     Setap     Setap	Firewall Setting     This Testure Hely our notes dat as all ternal!     Web Management Portmakes you be able to change default portnumber of the Remote Management UL     Remote Management makes you be able to change default portnumber of the Remote Management UL     Remote Management makes you be able to change default portnumber of the Remote Management UL     Remote Management makes you be able to change default portnumber of the Remote Management UL     Remote Management makes you be able to change default portnumber of the Remote Management UL     Remote Management Reveals you related to use one P address     Block Macket Scan is bit with the mader to be frameby the tackets     DM2 Hot IP Address can allow one local user to be exposed to the Internet. As local user wish to use some special-propole service such as internet game or Video-conferences.     Typu had set many WAN Able IP's, you can not Multiple DM2 (DefViltanced Zone) hots for different P     Web Management Port		
WANNAG CARE		r Enabled	* Output
CONG Skore     MAC Crami	Femile Management		
	PANT	# Erebed	C Disatteret
	Hacker Atack Protect	# Erebled	C Disabled
	Elicck Hacker Scan	# Erabled	C Disabled
	DWZ Host IP Address	r: Enabled	# Disabled
		[mm] ]	(and )

#### Figure 6-3: Firewall Setting menu

If you make the DMZ Host IP Address enabled, the following screen will appear.



#### Figure 6-4: Firewall Setting menu with DMZ enabled

Your can choose the WAN IP set up previously in 3.2.4 Alias IP Setup as your IP address. You can enter the desired IP address number in the blank of the LAN IP.

# Privilege

Privilege setting allows you to keep certain PCs on your network from accessing to the Internet. You can set up a filter through an IP address or network port number. Users who have their IP address or Port number listed on the "Blocked Private Address" field or "Block Private Ports" field will no longer be able to access the Internet. Figure 3-27 shows the screen of Privilege setting

P Seetas P Tixle P Advanced		P	Port	Туре	Enable
LANP Setting     DHCP Setting     EnclP Setting     Frowall Setting	3,	192.109.0		#TOP CUDP	
<ul> <li>Privilege</li> <li>Virtual Servers</li> </ul>	2	102.108.0		# TCP CUDP	n
<ul> <li>Roamo</li> <li>WWN MAC Come</li> <li>EDNE Sepro</li> </ul>	3.	182 168 0		#TCP CUDP	F
He MAC Clerch Real Heat	4	192 103 0		#TCP CUDP	15
	5.	192.103.0		#TOP CUDP	n.
	6.	192 199 0	<u> </u>	# 1CP	,e

Figure 6-5: Privilege Setting Screen

# **Virtual Servers**

This feature allows you to make Servers on your LAN accessible to Internet users. Normally, Internet users would not be able to access a server on your LAN because:

- Your Server does not have a valid external IP Address.
- Attempts to connect to devices on your LAN are blocked by the firewall in this device.

The "Virtual Server" feature solves these problems and allows Internet users to connect to your servers.

#### To Internet users, all virtual Servers on your LAN have the same IP Address. This IP Address is allocated by your ISP.

This address should be static, rather than dynamic, to make it easier for Internet users to connect to your Servers.

However, you can use the *DDNS (Dynamic DNS)* feature to allow users to connect to your Virtual Servers using a URL, instead of an IP Address.

You can set up public services on your network by configuring the values in the Virtual Servers Setting menu. You may assign certain IP addresses as the destination of the network information. When users from the Internet make certain requests of your network, the Router will forward those requests to the appropriate computer. The DHCP function must be disabled to use this function.

This function is generally used to set up a web server, ftp server, or e-mail server on your network. Figure 3-28 shows the screen of Virtual Servers Menu. If you had set Alias IP for WAN, Figure 3-29 shows the screen of Virtual Servers Menu.

To add a Virtual Server:

- 1. Select the Profile number used by the server.
- 2. Click on the "Name" column and enter the application name.
- 3. Select Enabled or Disabled to enable or disable the profile.

4. Enter the IP Address of the server that you want the Internet users to be able to access.

- 5. Configure as many entries as you would like until all the link entries are filled.
- 6. Click the "Apply" button to save the settings.

Home     Solap Waard     Solap Waard     Bee Solap     Betes     Des Tools     C LAN IP Setting     C HCP Setting     C HCP Setting     C Prevel Setting	FTP at your local site via public IP add configured with private IP address. In a port number, the gateway redects the You can define up to 10 application pro the public IP's as the Virtual Server. So Internet gaming, video conferencing, Int	I server, remote users accensing services such as Web or messes can be automatically redevoted to local servers ther words, depending on the requested service (TCP/UDP existensi service request to the appropriate server diles and if you had set many WAN Alian P's, select see of one applications require multiple consections, such as terrest telephony and others. These applications cannot work 4T) is enabled. If you need to run applications that require 4T
Printage     Virtual Servers	Application to Configure :	Select on entry 😁
E Routing	Name	Enter application name
<ul> <li>WAN MAC Close</li> <li>DONS Setting</li> </ul>	Status	Eelect status 👻
MAC Castrol	P Address :	192, 168, 1, 0
	Well-known Parts	Service Pen(8-65535) 1. 0 - 8 2. 0 - 8
	(Commonly Used Peris)	3. 0 = 0
	7 (Exhs) 21 (717) 22 (761467)	4. 0 - 0
	25 (SMTP) 50 (DMS)	5. 0 - 0
	T8 (Hegeo) 00 (#177) 110 (P070) 114 (MUT7)	6. 0
	101 (SMMP) 102 (SMMP Trap)	7. 0 - 8
		8. 0 - 0
		9. 0 - 0

Figure 6-6: Virtual Server Setting Screen

Application to Configure: You can choose one of 10 applications to configure.

Name: Enter the desired name in the column.

Status: Choose Enabled to enable it or Disabled to ignore.

IP Address: Set IP addresses to be detected by users.

#### WAN Address:

If more than one Alias Address is set in section 3.2.5 the Alias IP Setup, you can get multiple WAN IP addresses to choose. The following screen will appear with a pull-down column in WAN Address.

#### Service Port:

You can arrange certain range of ports to each profile. The minimum number is 0,and the maximum port number is 65535.

# **Routing Configuration**

#### **Static Routing:**

You may set up a static route if your want to connect your router to more than one network. A static route is a pre-determined pathway that network information must travel to reach a specific host or network.

Create a Static route entry as follows:

- 1. Select "Static Routing" from the drop down list.
- 2. Enter the following data to set the Static Routing:

#### **Destination LAN IP**

You can create a static route by entering the IP address of the remote host or network. If you wish to build a route to the entire network, be sure to set the network portion of the IP address to zero (0).

#### Subnet Mask

The Subnet Mask determines which portion of an IP address is the network portion, and which portion is the host portion.

#### **Gateway IP**

This is the address of the gateway device that allows for a contact between the Router and the remote network or host.

#### **Dynamic Routing:**

Dynamic Routing can be used to cache routes learned by routing protocols, thus allowing the automation of static routing maintenance. The router, using the RIP protocol, determines the network packet's route based on the fewest number of hops between the source and the destination. In this case, you could automatically adjust to physical changes in the network's layout. Complete the following steps to set up dynamic Routing:

Step 1 Choose the Working Mode.

**Gateway Mode** means the router is served as a gateway that hosts your network's connection to the Internet.

**Router Mode** means there is more than one router that exists on your network.

- **Step 2** Select **Dynamic Routing** from the drop down list and choose the protocol you wish to use on your network.
- Step 3 Click the "Apply" button.

Home     Setup Witcard     Setup     Setup     Setup     Definit		path for data to follow on the network. The router will continue to noise not to enable this feature
Advanced	Static Rooting :	Select Route entry
<ul> <li>DHCP Sating</li> <li>Firewall Setting</li> </ul>	Destination LAN IP	0,0,0,0,0
Privilege     Visual Servers	Submet Mask :	
Rauting     WAN MAC Clans     DONS Setting	Gateway	
MAC Control	Gateway mode should be	p allows your network to dynamically adjust to layout changes, i used if your router is hosting your network's connection to the ould be selected if the muter estate on a network with other
	Working Made :	Gateway     O Router
	Dynamic Routing :	DISABLED
		Apply Canzal

Figure 6-7: Routing Configuration Screen

# WAN MAC Clone

Enter the MAC Address if your ISP allows access of one specific PC's Ethernet MAC address.

Click **Restore MAC Address** to return to the default setting.



Figure 6-8: WAN MAC Clone Screen

# **DDNS Configuration**

Setting the Dynamic DNS allows others to access your FTP or Web service on your computer using DNS-like address.

DDNS Status: Choose Enabled to enable it or Disabled to ignore.

Retry Time: It allows the router to make the connection again in the period you set.

**DDNS Server**: Choose the desired server from the drop down list. Click the **Website** to make the link to the server.

Host name: It is the DNS-like address used to access your FTP or web service.

User Name: This is the user name for your account at DNS server.

**Password**: This is the password for your account at DNS server.

Home     D Setap Wased     Be Setap     Setap		ou to update your dynamic IP address with one or many dynamic DNS services, your PTP or Web service on your computer using DNS-like address.
B Tools B Advanced	DDNS Status :	O Enable 🛞 Disable
LANIP Setting	Retry Time :	5 minutes
CHCP Satisfy     Freewall Setting	DDNS Server	MyDynDris w Webme
Protege     Vitaal Servers	Host Nome :	
E Posting	User Nome :	
WAN MAD Clone     DORS Setting     MAC Control	Password	
Re He		Apply Cancel



# **MAC Control**

This feature allows you to block certain specific PCs accessing your ISP.

Home     Mane     Manee     Maneeeeeeee	MAC Constant The case block restance classifier(a) accounting the MAC Address Constant: Altern arraymenting MAC address connect to b MAC Address Constant (cal	P Grant. P	
E Person Lobe Profess Profes	Mino Casesot No Informat	NEC Address Address Range (Smart)	CEAM

Figure 6-10: MAC Access Control Screen

# Appendix A Troubleshooting



This Appendix covers the most likely problems and their solutions.

## **Overview**

This chapter covers some common problems that may be encountered while using XRT-401B and some possible solutions to them. If you follow the suggested steps and XRT-401B still does not function properly, contact your dealer for further advice.

## **General Problems**

#### Problem 1: Can't connect to XRT-401B to configure it.

#### **Solution 1:** Check the following:

- XRT-401B is properly installed, LAN connections are OK, and it is powered ON.
- Ensure that your PC and XRT-401B are on the same network segment. (If you don't have a router, this must be the case.)
- If your PC is set to "Obtain an IP Address automatically" (DHCP client), restart it.
- If your PC uses a Fixed (Static) IP address, ensure that it is using an IP Address within the range 192.168.0.2 to 192.168.0.254 and thus compatible with XRT-401B's default IP Address of 192.168.0.1.

Also, the Network Mask should be set to 255.255.255.0 to match XRT-401B.

In Windows, you can check these settings by using *Control Panel-Network* to check the *Properties* for the TCP/IP protocol.

# **Internet Access**

#### Problem 1: When I enter a URL or IP address I get a time out error.

- **Solution 1:** A number of things could be causing this. Try the following troubleshooting steps.
  - Check if other PCs work. If they do, ensure that your PCs IP settings are correct. If using a Fixed (Static) IP Address, check the Network Mask, Default gateway and DNS as well as the IP Address.
  - If the PCs are configured correctly, but still not working, check XRT-401B. Ensure that it is connected and ON. Connect to it and check its settings. (If you can't connect to it, check the LAN and power connections.)
  - If XRT-401B is configured correctly, check your Internet connection (DSL/Cable modem etc) to see that it is working

correctly.

#### Problem 2: Some applications do not run properly when using XRT-401B.

**Solution 2:** XRT-401B processes the data passing through it, so it is not transparent.

Use the *Special Applications* feature to allow the use of Internet applications which do not function correctly.

If this does solve the problem you can use the *DMZ* function. This should work with almost every application, but:

- It is a security risk, since the firewall is disabled for the DMZ PC.
- Only one (1) PC can use this feature.

# Appendix B Specifications



# **XRT-401B**

Model	XRT-401B
Dimensions	141mm(W) * 100mm(D) * 27mm(H)
Operating Temperature	0° C to 50° C
Storage Temperature	-10° C to 70° C
Network Protocol:	CSMA/CD, PPPoE, PPP, PPTP Client, ARP, DHCP Client and Server, TCP/IP, UDP, ICMP, RIP1/RIP2, DNS Proxy, Dynamic DNS, SNTP
Network Interface:	6 Ethernet: 4 * 10/100BaseT (RJ45) auto-Switching Hub ports for LAN devices 1 * 10/100BaseT (RJ45) "uplink" port 1 * 10/100BaseT (RJ45) for WAN
External Power Adapter	9V DC, 800mA

## FCC Statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### **CE Marking Warning**

This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.